

CLAIMS

I Claim:

- 5 1. An air suspension grain cleaner system, comprising:
a frame;
a cleaning chamber attached to said frame;
a blower unit fluidly connected to a lower portion of said cleaning chamber;
a grain inlet fluidly connected to said cleaning chamber;
10 an exhaust chamber fluidly connected to an upper portion of said cleaning
chamber; and
a cleaning damper within said cleaning chamber.
- 15 2. The air suspension grain cleaner system of Claim 1, including an exhaust
damper within said exhaust chamber.
- 20 3. The air suspension grain cleaner system of Claim 2, wherein said exhaust
damper is comprised of a plate member.
- 25 4. The air suspension grain cleaner system of Claim 2, wherein said exhaust
damper is positioned near an exhaust opening within said exhaust chamber.
5. The air suspension grain cleaner system of Claim 2, wherein said exhaust
damper controls the airflow within said cleaning chamber.

6. The air suspension grain cleaner system of Claim 2, including an adjustment handle mechanically connected to said exhaust damper for controlling a position of said exhaust damper.

7. The air suspension grain cleaner system of Claim 1, wherein said cleaning damper is comprised of a wall member that extends inwardly to reduce the cross sectional size of said cleaning chamber.

8. The air suspension grain cleaner system of Claim 7, including a cap member attached to the upper portion of said wall member and a wall of said cleaning chamber.

9. The air suspension grain cleaner system of Claim 1, including a first control member positioned between said grain inlet and said cleaning chamber to prevent pressurized air from passing through said grain inlet.

10. The air suspension grain cleaner system of Claim 9, wherein said first control member is a tubular member rotated by a motor unit that has a longitudinal slot for receiving grain and for dispensing grain into said cleaning chamber without significantly reducing air pressure within said cleaning chamber.

11. An air suspension grain cleaner system, comprising:
a cleaning chamber having a vertically aligned tubular structure;
a blower unit fluidly connected to a lower portion of said cleaning chamber;

a grain inlet fluidly connected to said cleaning chamber;
an exhaust chamber fluidly connected to an upper portion of said cleaning chamber; and
an exhaust damper within said exhaust chamber.

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12. The air suspension grain cleaner system of Claim 11, including a cleaning damper within said cleaning chamber.

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13. The air suspension grain cleaner system of Claim 11, wherein said exhaust damper is comprised of a plate member.

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14. The air suspension grain cleaner system of Claim 11, wherein said exhaust damper is positioned near an exhaust opening within said exhaust chamber.

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15. The air suspension grain cleaner system of Claim 11, wherein said exhaust damper controls the airflow within said cleaning chamber.

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16. The air suspension grain cleaner system of Claim 11, including an adjustment handle mechanically connected to said exhaust damper for controlling a position of said exhaust damper.

17. The air suspension grain cleaner system of Claim 12, wherein said cleaning damper is comprised of a wall member that extends inwardly to reduce the cross sectional size of said cleaning chamber.

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18. The air suspension grain cleaner system of Claim 17, including a cap member attached to the upper portion of said wall member and a wall of said cleaning chamber.

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19. The air suspension grain cleaner system of Claim 11, including a first control member positioned between said grain inlet and said cleaning chamber to prevent pressurized air from passing through said grain inlet.

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20. The air suspension grain cleaner system of Claim 19, wherein said first control member is a tubular member rotated by a motor unit that has a longitudinal slot for receiving grain and for dispensing grain into said cleaning chamber without significantly reducing air pressure within said cleaning chamber.